Final-- October 15, 1987

BHWM-SR

Preliminary Assessment
Rakonen Drum Site
Brigham City, Utah
UT0981545981

TABLE OF CONTENTS

Figures

Attachments

Final-- October 15, 1987

EXECUTIVE SUMMARY

Preliminary Assessment
Rakonen Drum Site
Brigham City, Utah
UTD981545981

1.0 Setting

The Rakonen Drum Site (RDS) is located at 112 South 800 West in Brigham City, Utah (see Figure 1). The entire property (illustrated in Figure 2) is currently owned by Arnold Thompson. John Rakonen is the owner of the drums.

The site is bounded along its western border by a 3 ft. barbed wire fence; railroad tracks bound the site on the other side of this fence. On the north, south, and east, the site is fenced off by a 12 ft. chain-link fence. The only access road is controlled by a gate that is secured nightly with a chain and padlock. The gate is open, and unguarded during working hours. There is a small manufacturing business called Associated Mfg., Inc. operating in the building closest to the drums in the northern portion of the site.

Mr. Rakonen began storing the drums at RDS in 1983. He buys the drums (which contain surplus materials) from Morton Thiokol, then resells the materials to interested parties under the business title of Propulsion Dynamics. Mr. Rakonen was storing drums of the same type of materials at another site in North Ogden, but the material caught fire and the majority of it was destroyed in the fire. It is not known whether any remaining drums from that site were removed to the site in Brigham City.

2.0 Characterization of Potential Hazard

Approximately 800 drums of material are in storage at the site. The material contained in the drums is mostly R-45 Polymer (see Attachment 1); however, aluminum powder, potassium chloride, 1-ethenyl-2-pyrrolidinone, acrylic acid-2-ethylhexyl ester, and dioctylamine are also contained in some of the drums. The quantities of each are listed in part 2 of the form Preliminary Assessment along with their respective CAS numbers.

Many of the drums are leaking (see the site photos in Attachment 2), and have been leaking for at least a year. State personnel visited the site on October 22, 1986 and the drums were leaking then. Laurie Goldner, one of the State employees present during this visit, indicates in her write-up of the site visit (see Attachment 3) that an exposed area of the concrete where drums are being stored, was covered with materials from the drums to a depth of approximately one inch.

Berms or other impounding structures are not present in the areas where the drums are being stored, so run-off is likely. In fact, during a site visit on July 1, 1987, materials leaking from the drums was observed to be flowing directly onto the ground.

Additionally, there is a concern due to activities which occurred at the site prior to Mr. Rakonen's storage of drums there. A small tar pit was found and photographed which is believed to be from an old cannery operation at the site. This material has been disposed of on unlined soil, and is not impounded in any way. Direct contact with the material is a potential problem, and contaminants from the tar could leach into ground water. Although the precise nature of the tar is unknown, it is believed that the tar may be composed of the same constituents as coal tars, and is therefore cause for concern.

2.1 Characterization of Drum Materials

According to SAX, all of the materials stored in drums on-site have a toxicity of 2 or less. There is also a potential for carcinogenesis due to direct contact with or ingestion of the materials being stored at RDS, particularly the R-45 polymer; however, since studies focusing on the carninogenic potential of those materials has not been performed, the exact nature of such a potential is unknown.

Most of the materials being stored on-site are ignitable. A fire at another site (previously cited; also mentioned in Attachment 3) involving the same type of materials has demonstrated the ignitable nature of such materials. When the materials are burned, copious amounts of thick, black acrid smoke is generated. Moderately toxic substances may also be released and become airborne with the smoke while these materials burn.

3.0 Pathways and Receptors

3.1 Ground Water

Ground water is a potential pathway for contaminant migration. Since the native soil is very permeable, and the water table is < 12 ft. below the surface, and since the materials stored/disposed of on-site are in a state of unstable containment, the potential for ground water contamination is high. Ground water flow is to the west.

The potable water supply for Brigham City residents comes from six springs and one deep well all located at a higher altitude, approximately five miles east from the site. Drinking water contamination is therefore not a potential threat at this point in time. Future developement and growth of Brigham City may involve the use of ground water within 3 miles of the site for potable purposes, however.

Two wells located less than a mile from the site are used for irrigation. One is used to irrigate the cemetary, and the other is used to irrigate a golf course. Ground water downgradient from the site may also be used for irrigation of crops and orchards. The total acreage irrigated by ground water within 3-miles of the site is unknown. A more detailed investigation of irrigation by ground water could be included at the Site Inspection phase.

3.2 Surface Water

Aside from ponded water which may occur following precipitation, no surface water sources exist on-site. The nearest surface water is a large, man-made pond located in a park roughly two blocks away, and used for recreation and asthetics.

Surface water within three miles of the site is not used for potable purposes. It may be used for irrigation, and may also serve as a source of drinking water for indigenous fauna, however.

Surface water within 3-miles could potentially be contaminated by hazardous substances originating from the site, if ground water that had been contaminated by materials from the site served as a source of recharge. Such contamination would be dependant on the concentration of hazardous substances in the ground water, the fate of those substances over time, ground water flow rates, and the volume per unit time of ground water supplied to the surface water body of concern.

Due to the characteristically slow rate of flow associated with ground water, and the volume of surface water being recharged by ground water (as well as other sources), the potential for surface water contamination is deemed to be minimal.

3.3 Air

Little or no potential threat of an air release due to volatization of organic chemicals exists at RDS because materials currently stored on-site are not of that character. However, as mentioned above, materials being stored at the site are ignitable. When the materials are burned, copious amounts of thick, black acrid smoke is generated. Moderately toxic substances may also be released and become airborne with the smoke while these materials burn.

Many of the drums are leaking material and have done so for at least a year, and the native vegetation is very dry during the hot summer months. The buildings around the site are old, and mostly made of wood. Associated Mfg., Inc. may also have flamable materials inside the building they are using which is less than 100 yards from the drums. Moreover, there is a High School located 1 block south of the site. Students at this school could potentially walk on-site unnoticed, and cause a fire either accidentally or intentionally. Although a near-by school was not associated with the fire at the other site, it is believed that similar circumstances were the cause of that fire. Hence, the potential for fire and the subsequent air release at the site is quite high.

3.4 Receptors

As indicated in the form Preliminary Assessment, the total population potentially affected is 20,000. This figure is the estimated population of Brigham City living within 3-miles of the site and is the number potentially affected by a possible air release (see section 3.3 above).

4.0 Conclusions and Recommendations

The primary potential threat to public health and the environment appears to be fire hazard and potential air release from such a fire. In order to mitigate this potential, the State will contact Mr. Rakonen and discuss the need for action at this site. This contact will be followed up on by the State to ensure that mitigation of the fire potential has occurred.

Finally, the State recommends that no further action under CERCLA be initiated at the site unless Mr. Rakonen fails to remove the drums. In the event that Mr. Rakonen fails to remove the drums from the site, the State will initiate removal action.

4847U

EPA POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE 02 SITE NO.
UTD981545981

II. SITE NAME AND LOCATION

01 SITE NAME (Logo, common or descriptive name of site)
Rakonen Drums

02 STREET, ROUTE NO. OR SPECIFICATION LOCATION IDENTIFIER 03 CITY
112 South 800 West Brigham City

04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST.
Utah	84302	Box Elder	001	UT-01

09 COORDINATES LATITUDE LONGITUDE
41° 30'34.7" 112° 01'38.9"

10 DIRECTIONS TO SITE (Starting from nearest public road)
Take Interstate Highway 15 to Brigham City exit. Drive east on U.S. Route 89 to Main Street. Turn left and drive north on Main Street to 2nd South Street. Turn left and drive west on 2nd South Street to 800 West Street. Turn right and drive north on 800 West street approximately half a block. Site should be in view now.

III. RESPONSIBLE PARTIES

01 OWNER (if known) 02 STREET (Business, mailing, residential)
Arnold R. Thompson 753 Sunset Drive

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Brigham City	Utah	84302	(801) 723-7894

07 OPERATOR (if known and different from owner)
John Rakonen

08 STREET (Business, mailing, residential) 09 CITY 10 STATE
2766 North 1050 East Ogden Utah

11 ZIP CODE 12 TELEPHONE NUMBER
84404 (801) 782-7714

13 TYPE OF OWNERSHIP (Check one)
X A. PRIVATE B. FEDERAL:_____ C. STATE
D. COUNTY E. MUNICIPAL F. OTHER:_____ (Specify) G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
A. RCRA 3001 DATE RECEIVED ___/___/___
B. UNCONTROLLED WASTE SITE (CERCLA 103c) DATE RECEIVED ___/___/___
X C. NONE

IV CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)
X YES DATE 10 /22 / 86
NO
A. EPA B. EPA CONTRACTOR
X C. STATE D. OTHER CONTRACTOR
X E. LOCAL HEALTH OFFICIAL
F. OTHER:_____ (Specify)
CONTRACTOR NAME(S):

02 SITE STATUS (check one)
X A. ACTIVE B. INACTIVE C. UNKNOWN

03 YEARS OF OPERATION 1983 (BEGINNING YEAR) Present (ENDING YEAR) UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT KNOWN OR ALLEGED
Approximately 800 drums containing R-45 polymer, potassium chloride, acrylic acid-2-ehtylhexyl ester, 1-ethenyl-2pyrrolidinone, and dioctylamine. Most of the drums contain R-45 polymer.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Many of the drums are leaking and materials that have leaked out have run-off onto the surrounding soil. Soil contamination and potential ground water contamination are of concern here. There is also the potential for direct contact with materials present on-site, and the potential for fire is very high.

V PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one, if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

A. HIGH (inspection required promptly)
B. MEDIUM (inspection required)
C. LOW (inspect on time available basis)
X D. NONE (No further action needed, complete current disposition form)

VI INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency, Organization)	03 TELEPHONE NUMBER
Michael Long	UBSHW	(801) 538-6170

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.
Michael Long		UBSHW	(801) 538-6170

08 DATE
July 2, 1987

EPA FORM 2070-12(7-81)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NO.
UTD981545981

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- A. SOLID
- X B. POWDER, FINES
- C. SLUDGE
- D. OTHER _____ (Specify)
- E. SLURRY
- X F. LIQUID
- G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)
TONS _____
CUBIC YARDS _____
NO. OF DRUMS 800 (55 gal @)

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- B. CORROSIVE
- C. RADIOACTIVE
- D. PERSISTENT
- X E. SOLUBLE
- F. INFECTIOUS
- G. FLAMMABLE
- X H. IGNITABLE
- I. HIGHLY VOLATILE
- J. EXPLOSIVE
- X K. REACTIVE
- L. INCOMPATIBLE
- M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
XOCC	OTHER ORGANIC CHEMICALS	780	drums	55 gallons each
XIOC	INORGANIC CHEMICALS	Four	drums	55 gallons each
XACD	ACIDS	Ten	drums	55 gallons each
BAS	BASES			
XMES	HEAVY METALS	Five	drums	50 gallons each

IV. HAZARDOUS SUBSTANCES (See Appendix formost frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Aluminum Powder	7429905	Drums	Powder contained in 50 gallon drums.	
IOC	Potassium Chloride	7447407	Drums	Liquid contained in 55 gallon drums.	
OCC	HB Polymer (see attachment 1)		Drums	Liquid contained in 55 gallon drums.	
OCC	1-Ethenyl-2Pyrrolidinone	88120	Drums	Liquid contained in 55 gallon drums.	
ACD	Acrylic Acid-2-Ethylhexyl Ester	103117	Drums	Liquid contained in 55 gallon drums.	
OCC	Dioctylamine	1120485	Drums	Liquid contained in 55 gallon drums.	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	Not applicable		FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

UBSHW site file, Ron Taylor, Morton Thiokol's Environmental Specialist, Box Elder County Recorder's Office (property ownership records), on-site survey (07/01/87), John Rakonen.

EPA POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE 02 SITE NO.
UTD981545981

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A. GROUNDWATER CONTAMINATION 02 OBSERVED (DATE:_____) POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 0 ALLEGED
04 NARRATIVE DESCRIPTION
Drums are currently stored on slabs of cement. No impounding structures are present, and many of the drums are leaking. Run-off from the drum storage areas flows directly onto the soil and thereafter to ground water. Leaking materials are also flowing onto the surrounding soil. Run-off water may contain hazardous materials, and the materials leaking from the drums may contaminate ground water also.

01 B. SURFACE WATER CONTAMINATION 02 OBSERVED (DATE:_____) X POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 0 ALLEGED
04 NARRATIVE DESCRIPTION
The nearest pond is over two blocks away. This water could potentially be contaminated by materials originating from the site, if such materials had contaminated ground water, and this contaminated ground water flowed into the pond. The potential for such contamination is minimal.

01 C. CONTAMINATION OF AIR 02 OBSERVED (DATE:_____) X POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 20,000 04 NARRATIVE DESCRIPTION
If a fire were to occur, acrid smoke and toxic fumes would be released into the air. Since the potential for fire is high, the potential for air contamination is equally high. The population affected is the population of Brigham City.

01 D. FIRE/EXPLOSIVE CONDITIONS 02 OBSERVED (DATE:_____) X POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 20,000 Population of Brigham City) ALLEGED
04 NARRATIVE DESCRIPTION
The majority of the drums contain materials that are ignitable. A large fire at another storage facility where the same materials were stored occured on June 1, 1984. Since the drums currently being stored on-site are leaking and have leaked a substantial amount of material, fire potential is quite high. The native vegetation is also quite dry and neighboring buildings could be consumed by fire if fire were to occur.

01 E. DIRECT CONTACT 02 OBSERVED (DATE:_____) X POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3 (est. number present on-site) 04 NARRATIVE DESCRIPTION
The site is in a residential area. Children/teens could be playing in the area while the gates are unlocked and open, and could come in contact with materials stored on-site.

01 F. CONTAMINATION OF SOIL X 02 OBSERVED (DATE: 07/01/87) X POTENTIAL ALLEGED
03 AREA POTENTIALLY AFFECTED:_____ 04 NARRATIVE DESCRIPTION
Materials leaking from the drums were observed to be flowing onto the surrounding soil during a site survey.

01 G. DRINKING WATER CONTAMINATION 02 OBSERVED (DATE:_____) X POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 0 ALLEGED
04 NARRATIVE DESCRIPTION
Drinking water for Brigham City residents comes from six springs and one deep well all located near Mantua Reservoir which is approximately five miles east of Brigham City.

These sources are at a higher elevation than Brigham City so any contamination of these sources originating in Brigham City is highly unlikely.

01 H. WORKER EXPOSURE/INJURY 02 OBSERVED (DATE:_____)X POTENTIAL ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 6 04 NARRATIVE DESCRIPTION
The drum site is managed and operated by John Rakonen. He may have someone assist in unloading drums from a truck to the site. Leaking drums and/or improper methods could lead to exposure or injury. There is also a business (Associated Mfg.) operating next to the site. Workers there could potentially be exposed to materials stored on-site.

01 I. POPULATION EXPOSURE/INJURY 02 OBSERVED (DATE:_____)XPOTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 20,000 04 NARRATIVE DESCRIPTION
As mentioned above, fire in an imminent threat, and the population of Brigham City could potentially be exposed to fumes from an on-site fire.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 J. DAMAGE TO FLORA 02 OBSERVED (Date:_____) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION
Materials leaking from the drums could potentially damage indigenous vegetation if the leaking occurred in a sufficiently large volume. A fire would certainly cause undeterminable damage to vegetation in the area. Run-off from the site may contain materials which could damage indigenous vegetation over a period of time.

01 K. DAMAGE TO FAUNA 02 OBSERVED (DATE:_____) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION
Local wildlife may drink from and/or bathe in ponded water on-site after a storm ingesting and/or coming in contact with materials which may be harmful or hazardous. Damage to fauna in the area is likely if a fire were to occur.

01 L. CONTAMINATION OF FOOD CHAIN 02 OBSERVED (DATE:_____) X POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
Fruit orchards and crops are irrigated with ground water. If hazardous materials originating from the site were to contaminate ground water, contamination of the food chain could occur. The potential for such contamination is minimal, however.

01 M. UNSTABLE CONTAINMENT OF WASTES X 02 OBSERVED (Date:07/01/87) POTENTIAL
(Soils/runoff/standing liquids/leaking drums) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 20,000 (Population potentially affected due to fire)
04 NARRATIVE DESCRIPTION
During a site visit, leaking drums were observed and photographed. Some of the material has contaminated soil in the immediate vicinity and run-off after storms is likely since berms or other impounding devices are not in place. This could result in ground water contamination. Moreover, the material is ignitable and therefore poses a potential fire threat as well.

01 N. DAMAGE TO OFFSITE PROPERTY 02 OBSERVED (DATE:_____) X POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
Materials being stored on-site are ignitable and reactive. Due to the volume of such materials currently present at the site, the potential for fire is high and fire would likely damage off-site property in the vicinity.

01 O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 OBSERVED (DATE:_____)
04 NARRATIVE DESCRIPTION X POTENTIAL ALLEGED
There are no storm drains in the path of run-off from the site, nor are there sewer lines which pass near or through the site. Ground water contaminated by contaminants originating from the site could potentially migrate to a location where sewers and/or storm drains have been emplaced and could potentially contaminate them. The potential for such contamination is minimal, however.

01 P. ILLEGAL/UNAUTHORIZED DUMPING 02 OBSERVED (DATE:_____) X POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
The site is fenced off by a 12 ft. fence on the north, south, and east. It is bounded on the west by a barbed wire fence and rail road tracks. During the night, access is not possible as gates are locked. The potential for illegal/unauthorized dumping is therefore minimal.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS
No other hazards are known of - potential or otherwise.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 20,000

IV COMMENTS
If a fire were to break out at the site, it is likely that such a fire would be large and would generate large quantities of smoke. Since the site is quite close to the center of town, Brigham City residents would be exposed to this smoke. Residents of Brigham City with existing respiratory problems would be affected to the greatest degree, but other residents would likely develope transient respiratory problems from the smoke generated by such a fire.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
UBSHW site files, Ron Taylor - Morton Thiokol's Environmental Specialist, on-site survey (07/01/87), John Rakonen.

Figure 1 - Site Location Map

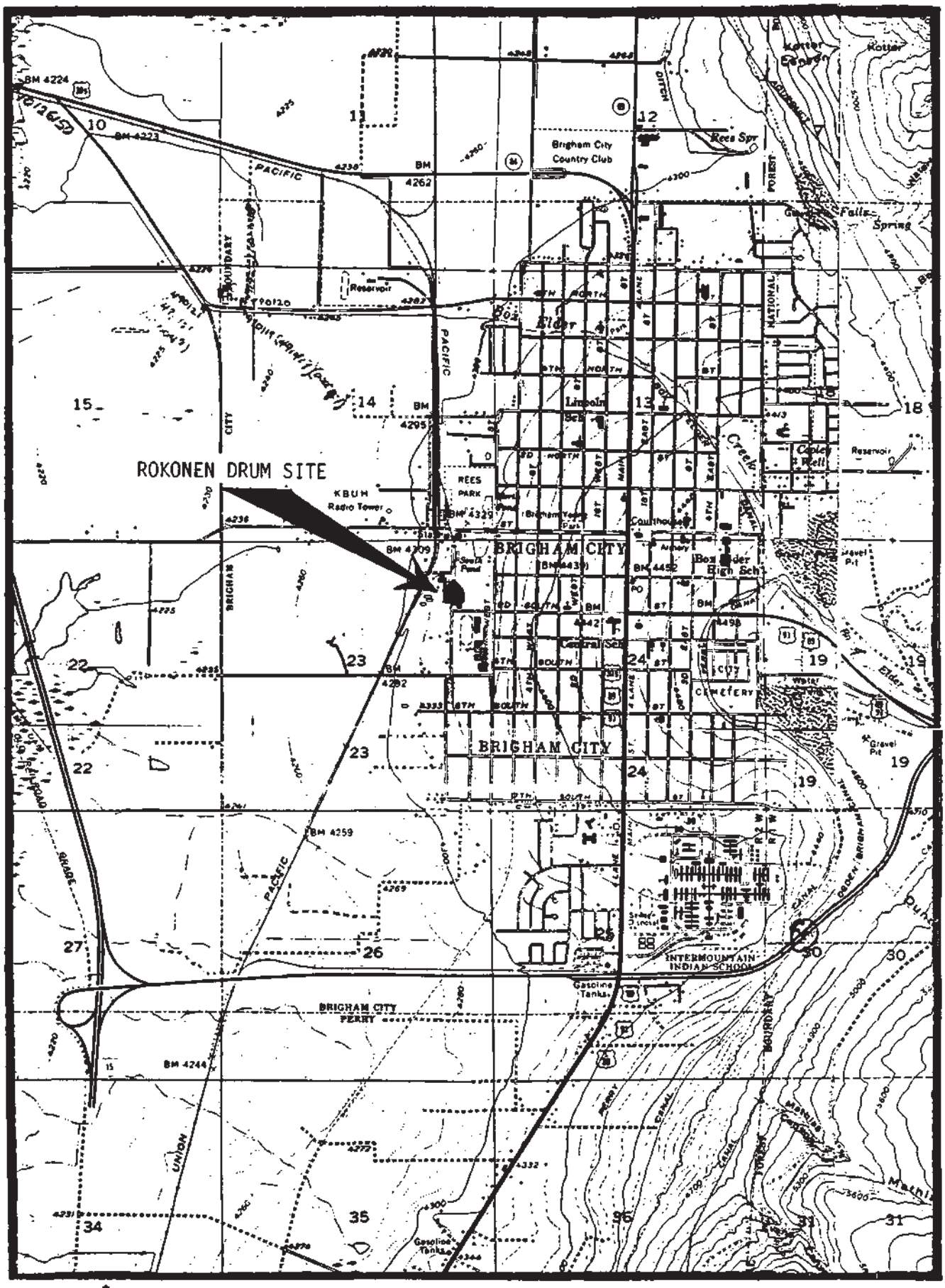
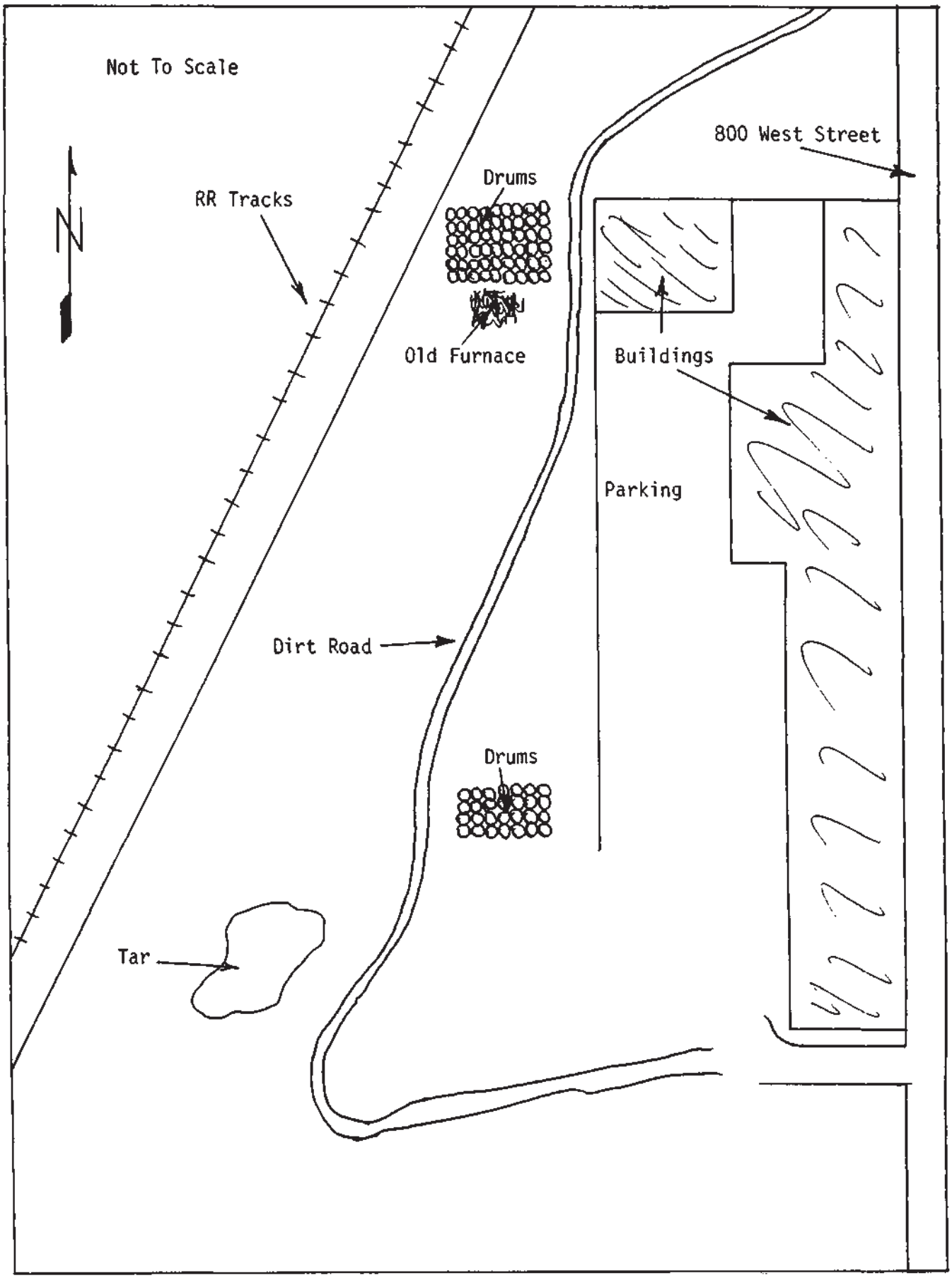


Figure 2 - Site Sketch



Attachment 1 - Material Safety Data Sheet

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
American Synthetic Rubber Corporation	448-2761
ADDRESS (Number, Street, City, State, and ZIP Code) P.O. Box 32960, 4500 Campground Rd., Louisville, KY 40232	
CHEMICAL NAME AND SYNONYMS Polybutadiene Acrylic Acid Acrylonitrile	TRADE NAME AND SYNONYMS PBAN
CHEMICAL FAMILY synthetic rubber	FORMULA

SECTION II · HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES Antioxidant(PBNA)	1.01	0	OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
None		

SECTION III · PHYSICAL DATA

BOILING POINT (°F.)	Unknown	SPECIFIC GRAVITY (H_2O=1)	0.936
VAPOR PRESSURE (mm Hg.)	"	PERCENT, VOLATILE BY VOLUME (%)	Unknown
VAPOR DENSITY (AIR=1)	"	EVAPORATION RATE (_____ _____ =1)	None
SOLUBILITY IN WATER	None		
APPEARANCE AND ODOR	Dark brown viscous liquid with pungent odor.		

SECTION IV · FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
Unknown			
EXTINGUISHING MEDIA: Dry powder.			
SPECIAL FIRE FIGHTING PROCEDURES: Same as for any flammable liquid.			
UNUSUAL FIRE AND EXPLOSION HAZARDS: None.			

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	Unknown
EFFECTS OF OVEREXPOSURE	Unknown
EMERGENCY AND FIRST AID PROCEDURES	Ingestion unknown.
	Skin contact not harmful.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID: Contact w/open flame.
	STABLE	X	
INCOMPATABILITY *(Materials to avoid)*	None		
HAZARDOUS DECOMPOSITION PRODUCTS	Unknown		
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Use industrial absorbent
WASTE DISPOSAL METHOD
Dispose in accordance with local, state or federal requirements.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*	Unknown	
VENTILATION	LOCAL EXHAUST: Normal work room ventilation	SPECIAL
	MECHANICAL *(General)*	OTHER
PROTECTIVE GLOVES: No.	EYE PROTECTION: No.	
OTHER PROTECTIVE EQUIPMENT: Unknown.		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store away from heat.
OTHER PRECAUTIONS

Form OSHA-20
Rev. May 72

Attachment 2 - Site Photographs

Drums in northern part of site.

Drums in northern part of site; photo of leaking materials.

Drums in southern part of site.

Tar pit photo.

Drums in southern part of site.

Photo of leaked materials in northern part of site.

Photo of leaking drums in northern part of site.

More leaking drums.

Attachment 3 - On-Site Inspection Report

SITE INSPECTION REPORT

Date:	October 22, 1986
Facility:	John Rakonen Drum Storage Site 156 South 800 West Brigham City, UT
Facility Contact:	none
Time in:	11:45 a.m.
Time out:	12:15 a.m.
Inspectors:	Laurie Goldner, BSHW Mary Pat Bock, BSHW Lee Malmberg, Bear River District Health Department

Report Prepared by: Laurie Goldner

John Rakonen is an employee of Morton Thiokol and has been buying surplus materials from Thiokol with the apparent intention of reselling them. He has been using an abandoned lot at 156 South 800 West, Brigham City to store these materials.

The site contains approximately 400 55-gallon drums, stored in two groups. The first group consists of approximately 300 drums that are stacked two layers high on wooden pallets. It appeared that about 98% of these drums were placed on a concrete slab, the remnants of an old building foundation. According to Lee Malmberg and Bill Sinclair, the drums contain a type of tarry resin and have been stored at this site for at least three years. Dates on some of the drums ranged from 1970-1986. Many of these drum were leaking, and an exposed area of the concrete was covered at least an inch deep with leaked resin.

The second group of drums was located about 50 feet away from the resin drums. Labels indicated that the drums contained "Arco Liquid Resin" (approximately 50-75 drums), Potassium Chloride, and Aluminum Powder. These drums were stored in a single layer and also on concrete, but only the four Aluminum Powder drums were on a pallet. Most of these drums were in good shape, with labels indicating that they had been removed from Thiokol's stock as recently as this past summer. However, several drums were unlabeled and badly deteriorated and leaking.

Rakonen had previously stored materials similar to the first group of drums at Smith and Edwards, which eventually caught fire and burned, producing a great deal of black smoke. The Brigham City Fire Marshall has visited the current storage site and expressed his concern that the materials may be flammable. Due to the unknown nature of the materials, he would be hesitant to have his firefighters respond to a fire at the site.

Bill Sinclair has previously seen Material Safety Data Sheets on the tarry resin, and doubts that it would qualify as a listed or characteristic hazardous waste. Information on the "Arco Liquid Resin" drums also seemed to indicate a relatively low toxicity/hazard substance.